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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,751	12/08/2003	Steven Spencer	12013/50201	9372

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EXAMINER	
LAMB, BRENDA A	

ART UNIT	PAPER NUMBER
1734	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
10/728,751	Spencer et al
Examiner	**Group Art Unit**
LAMB	1734

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☑ Responsive to communication(s) filed on 12/14/2004.

☑ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☑ Claim(s) 1-13 and 23-26 is/are pending in the application.

Of the above claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☑ Claim(s) 1-7, 9-13 and 23-26 is/are rejected.

☑ Claim(s) 8 is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____.

☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____.

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☑ Notice of Reference(s) Cited, PTO-892

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Interview Summary, PTO-413

☐ Notice of Informal Patent Application, PTO-152

☐ Other _____

Office Action Summary

Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "the axis about which the medical implant rotates" in claim 24 lacks proper antecedent basis.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 4 and 23-25 are rejected under 35 U.S.C. 102(5) as being anticipated by Granneman et al. 6,183,565.

Granneman et al teaches as shown in Figures 1-2 the design of a vessal for treating substrates comprised of a treatment chamber which includes elements 6-10 and 13. Granneman et al treatment chamber having an inside surface defining an inside of the treatment chamber, the first and second side sections, elements 6-7, are spaced apart to define an entrance gap to allow a substrate to pass there through. Granneman et al shows the treatment chamber includes a plurality of fluid passages positioned and sized to create a buffer zone of compressible fluid between the inside surface of the treatment chamber and the substrate when the compressible fluid has exited the plurality of fluid passages. Granneman et al teaches the vessel includes a compressible fluid supply 15 in fluid communication with at least one of the fluid passages. Granneman et al vessel and entrance 4 is capable of treating medical implants. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987). With respect to claim 4, Granneman et al teaches an outer case 2 which partially surrounds the treatment chamber, a coating supply coupled to the treatment chamber (see column 6 lines 23-29) and heating element (element 5 and 8) in thermal communication with the inside surface of the treatment chamber. With respect to claims 23-24, Granneman et al teaches at column 6 lines 58-64 that the passage are positioned and sized such that when compressible

fluid exits the plurality of fluid passages in the treatment chamber rotates the substrate about one of its axis, or the longitudinal axis. With respect to claim 25, Granneman et al shows in his Figures that the buffer zone of compressible fluid encircles the substrate.

Claims 1, 4, 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Granneman et al 6,183,565 in view of Cotter.

Granneman et al is applied for the reasons noted above. The same rejection applied to Granneman et al taken alone is applied here. Granneman et al entrance 4 is capable of allowing a medical implant to pass therethrough especially given the teaching of Cotter of using semiconductor wafer as a medical implant (see column 5 lines 65-67). With respect to claims 4, 23 through 25, the same rejection applied to Granneman et al taken alone is applied here.

Claims 9-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Granneman et al in view of Kuznetasov et al.

Granneman et al is applied for the reasons noted above. Granneman et al fail to teach a first set of fluid passages direct circulation of compressible fluids within the treatment chamber in a first direction and a second set of fluid passage direct circulation of compressible fluids within the treatment chamber in a second direction, the first direction different from the second direction, wherein the first direction is opposed to the second direction.. However, Granneman et al teaches at column 6 lines 61-64 angling the fluid passages to achieve the desired rotation. Therefore, it would have been obvious to modify the Grenneman et al treatment vessel such the gas openings or fluid passages are comprised of a first set of fluid passages direct circulation of compressible

fluids within the treatment chamber in a first direction and a second set of fluid passages direct circulation of compressible fluids within the treatment chamber in a second direction, the first direction different from the second direction, wherein the first direction is opposed to the second direction such as taught by Kuznetson et al for the taught advantage of greater control of rotation of the wafer (see Figure 4 and column 4 lines 26-44). With respect to claim 12, the recitation that the compressible fluid may be ejected from the first set of passages regardless of whether compressible fluid is being from the second set of passages does define the Granneman et al as modified with the Kuznetsov et al first and second set of passages. The fluid from the Kuznetsov et al fluid passages is ejected from either first and second set of passages and does not require ejection from both first and second fluid passages thereby reading on the recitation that the compressible fluid may be ejected from the first set of passages regardless of whether compressible fluid is being ejected from the second set of passages.

Claims 1, 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Amada.

Amada teaches that design of a vessel as shown in Figure 4 for treating substrates comprising: a treatment chamber having an inside surface defining the inside of the treatment chamber, an outside surface, an entrance capable of accepting a medical implant, a plurality of fluid passages (elements 41a, 41b), the passages positioned and sized to create a buffer zone of compressible fluid between the inside surface of the treatment chamber and a substrate placed therein with when

compressible fluid that has exited the plurality of fluid passages, and a compressible fluid supply in fluid communication with at least one of the fluid passages. Amada is capable of treating medical implants. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). Thus Amada teaches every element of claim 1. With respect to claim 23, plurality of fluid passages are positioned and arranged such that when the compressible fluid is exiting a substrate positioned in the treatment chamber rotates about one of its axes, its longtudinal axis. With respect to claim 25, Amada teaches the buffer zone of compressible fluid encircles the medical implant. With respect to claim 26, Amada teaches the buffer zone of compressible fluid enables one to provide a non-contacting state between the substrate and the inside surface of the treatment chamber thereby resulting in the prevention of contact between the substrate and the inside surface of the treatment chamber.

Claims 1, 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amada in view of Cotter.

Amada is applied for the reasons noted above. The same rejection applied to Amada taken alone is applied here. Amada entrance is capable of allowing a medical implant to pass therethrough especially given the teaching of Cotter of using semiconductor wafer as a medical implant (see column 5 lines 65-67). With respect to claims 23-26, the same rejection applied to Amada taken alone is applied here.

Claims 1, 3, 6 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Murray et al.

Marray et al teaches the design of an apparatus for treating a substrate comprised of a treatment chamber as shown in Figure 1. Murray et al treatment chamber has the following: an entrance capable of allowing passage of medical implant therethrough; and an inside surface and outside surface with a plurality of fluid passages (elements 46, 47, 48) to create a buffer zone on zone of surplus fluid between the substrate and inside surface of chamber. Murray et al shows a supply line/conduit for supplying a fluid which is coupled to at least one of the fluid passages. Murray's supply line is capable of supplying a compressible fluid to at least one of the fluid passage. Thus Murray teaches every structural element of the claimed apparatus set forth in claim 1. With respect to claim 3, Murray et al shows the treatment chamber is cylindrical and a cross-sectional view shows apertures or openings are uniformly spaced and positioned along the inside surface of the chamber. With respect to claim 6, Murray teaches the treatment chamber comprises end caps (elements 60 and 58) with an exhaust or opening such that the fluid passages circulate fluid within the treatment chamber. Murray et al apparatus is capable of treating a single medical device at a time. With respect to claim 13, absent a clear recitation of how the compressible fluid relates to the first and second coating fluid, Murray et al shows a first and second supply of coating (elements 30, 32) are coupled to the treatment chamber.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murray et al in view of Berg.

Murray et al is applied for the reason noted above. Murray et al fails to teach passages are coupled to a therapeutic. Berg et al teaches a method for treating a medical device- a stent. Berg et al teaches the coating applied to the stent includes a therapeutic material. Berg et al teaches a variety of techniques can be used to apply coating to the sent and can include immersion coating (see Berg et al at column 4 lines 19-34). Berg et al fails to disclose the coating apparatus having structure within scope of claim. However, it would have been obvious to practice the Berg et al process for coating a medical device with a coating which include a therapeutic using the Murray et al coating device for the taught advantage of the Murray et al apparatus– uniform coating.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murray et al in view of Aikawa et al.

Murray et al is applied for the reasons noted above. Murray et al fails to teach the treatment chamber is not opaque. However, it would have been obvious to manufacture the Murray et al treatment chamber from a material which is not opaque since it is known to construct a coating apparatus from transparent material such as transparent quartz such as taught by Aikawa et al for the taught advantages of transparent quartz-high corrosion resistance (see Aikawa et al –column 4 lines 13-22).

Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Schwarz et al.

Schwarz et al teaches the design of an apparatus for treating substrate as shown in Figure 1-2 comprised of treatment chamber having the following: an inside surface;

an outside surface; and an entrance. Schwarz et al treatment chamber has a plurality of fluid passages 14, 14' and shows line or conduit is fluidly coupled to the fluid passage. Schwarz et al apparatus is capable of treating medical devices. Schwarz et al teaches every element of the apparatus as set forth in claim 1. With respect to claims 2 and 4, Schwarz et al teach an injection nozzle (element 160) positioned within the treatment along the longitudinal axis of the treatment chamber Schwarz et al injection nozzle injects coating and therapeutic material from source of coating and source of therapeutic material which are fluidly coupled to the fluid passages. Schwarz et al show that a compressible fluid source fluidly coupled to the fluid passages. With respect to claim 3 and 6, Schwarz et al teaches treatment chamber may be cylindrical (see column 7 lines 54-57). Schwarz et al shows the fluid passageways are uniformly spaced along a lower portion of the inner surface of the chamber. Schwarz et al shows an exhaust and end cap or filter such that the fluid passages circulate fluid within the treatment chamber. Schwarz et al apparatus is capable of treating a single medical device at a time.

Applicant's arguments filed on 12/14/2004 have been fully considered but they are not persuasive.

Applicant's arguments the device being coated in the Murray apparatus is not suspended or buffered by fluid in the chamber rather the substrate is supported from outside of the chamber is found to be non-persuasive since it is not commensurate in scope with claim language. The claims are silent as to the suspension by fluid of the substrate in the chamber. Rather claim 1 recites the fluid passages create a buffer

zone between the substrate and inside surface of the treatment chamber and the term "buffer zone" as defined by Merriam – Webster's Collegiate Dictionary, Tenth Edition (1999) is "an area designed to separate" or a separating space and the Murray apparatus as shown in Figure 4 shows fluid passages arranged relative to the inlet and outlet of the treatment chamber so as to create a area or space which separates the substrate from the inside surface of the bore 44.

Applicant's argument that Schwarz et al fails to teach a buffer zone is found to be non-persuasive. Schwarz et al shows that air streams 161 and 140 at least temporarily suspend the substrate in the treatment chamber thereby, at least temporarily, create a buffer zone or separating zone between the substrates and the air distribution plate 130.

Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach or suggest a vessel for treating medical implants comprising: a treatment chamber having an inside surface defining the inside of the treatment chamber, an outside surface, an entrance sized to allow medical implant to pass through it, a plurality of fluid passages, the passages positioned and sized to create a buffer zone of compressible fluid between the inside surface of the treatment chamber and a medical implant placed therein with when compressible fluid that has exited the plurality of fluid passages, and a compressible fluid supply-line in fluid communication with at least one of the fluid passages, the apparatus is further comprised a first nozzle positioned within the treatment chamber, the first nozzle

slidable along a longitudinal axis of the treatment chamber, the first nozzle coupled to a supply of coating; and a second nozzle positioned within the treatment chamber, the second nozzle slidable along a longitudinal axis of the treatment chamber, the second nozzle coupled to a supply of coating.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Monday and Wednesday thru Friday with alternate Tuesdays off

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brenda A. Lamb

BRENDA A. LAMB
PRIMARY EXAMINER

Lamb/LR
March 1, 2005